



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/530,772	04/07/2005	Douglas McBain	OMNZ 2 00011 US	9969
40629 7590 08/14/2009 OMNOVA SOLUTIONS, INC. 175 GHENT ROAD FAIRLAWN, OH 44333-3300				
EXAMINER LEE, EDMUND H				
ART UNIT		PAPER NUMBER		
1791				
MAIL DATE		DELIVERY MODE		
08/14/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/530,772

Applicant(s)

MCBAIN ET AL.

Examiner

EDMUND H. LEE

Art Unit

1791

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 April 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 12-18 and 20-23 is/are pending in the application.
- 4a) Of the above claim(s) 10 and 15-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 12-14, 18 and 20-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/808)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-9, 12-14, 18, and 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yonemochi et al (USPN 6180043) in view of JP 11-147236 (English abstract and translation). In regard to claim 1, Yonemochi et al teach the claimed process (col 3, ln 17-52; col 4ln 49-col 5, ln 55; examples; and figs 1-3) except the step of recording data on a control apparatus. It should be noted that Yonemochi et al teach measuring various molding values including the claimed elapsed time, and mold cavity pressure and temperature (col 3, ln 17-52; col 4ln 49-col 5, ln 55; examples; and figs 1-3). JP 11-147236 teaches a composite molding process including recording various molding parameters such as time, pressure, and temperature in order to ensure the quality of a molded composite (paragraphs 13 and 16-18). JP 11-147236 also teaches comparing/evaluating recorded values and visual inspections of molded products to

produce the highest quality products. Since Yonemochi et al and JP 11-147236 are analogous with respect to injection molding composite products by injecting a material against a layer of material in the mold, it would have been obvious to one of ordinary skill in the art at the time the invention was made to record the measured values, i.e., elapsed time, mold cavity pressure, and mold cavity temperature, of Yonemochi et al as taught by JP 11-147236 in order to form high quality products. In regard to claim 2, such is taught by the above combination of Yonemochi et al and JP 11-147236. In regard to claims 3,5,6,7,8,18 and 20, such are taught by Yonemochi et al (col 3, ln 17-52; col 4 ln 49-col 5, ln 55; examples; and figs 1-3)—it should be noted that reduction of clamping pressure does not necessarily result in a change in mold cavity volume, and the times and durations taught by Yonemochi et al constitute the claimed predetermined times. In regard to claim 4, Yonemochi et al teach all of the claimed limitations except providing sensors between the mold members that define the mold cavity. The exact placement of sensors is a mere obvious matter of choice dependent on the mold equipment availability and of little patentable consequence to the claimed process since it is not a manipulative feature or step of the claimed process. Further, the claimed placement of the sensors is well-known in the molding art as an effective position to retrieve accurate data. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to position the sensors of Yonemochi et al between the mold members of Yonemochi et al in order to retrieve accurate data. In regard to claim 9, such is well-known in the molding art in order to reduce cycle time without compromising quality of the molded article. Thus, it would have been obvious to

one of ordinary skill in the art at the time the invention was made to inject the molding material of Yonemochi et al when the desired mold cavity temperature is achieved in order to reduce cycle time without compromising quality of the molded article. In regard to claims 12-14 and 21-23, such are conventional steps and procedures for quality control of a molding process. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the claimed limitations into the process of Yonemochi et al in order to efficiently control and monitor the quality of the molded articles of Yonemochi et al.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to EDMUND H. LEE whose telephone number is 571.272.1204. The examiner can normally be reached on MONDAY-THURSDAY FROM 9AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on 571.272.1316. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

EDMUND H. LEE
Primary Examiner
Art Unit 1791

EHL

/EDMUND H. LEE/

Primary Examiner, Art Unit 1791